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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		10789327
	Filing Date		2004-02-27
	First Named Inventor	CRANE, et al.	
	Art Unit	2836	
	Examiner Name	PATEL	
	Attorney Docket Number	20712-0090	

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DP	2	5235504		1993-08-10	Sood	
DP	3	5894736		1999-04-20	Beaverson et al.	
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DP	1	1271067	EP	A	2003-01-02	Daikin Industries Ltd.		<input type="checkbox"/>
DP	2	1376842	EP	A1	2004-01-02	Fanuc Ltd.		<input type="checkbox"/>
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Sheet 1 of 3

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Application Number	
Filing Date	February 27, 2004
First Named Inventor	CRANE et al.
Art Unit	n/a
Examiner Name	n/a
Attorney Docket Number	20712-0090

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Examiner Initials *	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
DP	A	US-6,579,067 B1	06-17-2003	Holden	
	B	US-6,459,606 B1	10-01-2002	Jadric	
	C	US-6,459,596 B1	10-01-2002	Corzine	
	D	US-6,434,960 B1	08-20-2002	Rousseau	
	E	US-6,408,645 B1	06-25-2002	Tsuboe et al.	
	F	US-6,370,888 B1	04-16-2002	Grabon	
	G	US-6,325,142 B1	12-04-2001	Bosley et al.	
	H	US-6,229,722 B1	05-08-2001	Ichikawa et al.	
	I	US-6,185,946 B1	02-13-2001	Hartman	
	J	US-6,124,697	09-26-2000	Wilkerson	
	K	US-6,031,738	02-29-2000	Lipo et al.	
	L	US-6,018,957	02-01-2000	Katra et al.	
	M	US-6,008,616	12-28-1999	Nagayama et al.	
	N	US-5,845,509	12-08-1998	Shaw et al.	
	O	US-5,528,114	06-18-1996	Tokizaki et al.	
	P	US-5,503,248	04-02-1996	Peruggi et al.	
	Q	US-5,509,504	04-23-1996	McHugh et al.	
	R	US-5,492,273	02-20-1996	Shah	
	S	US-5,446,645	08-29-1995	Shirahama et al.	
DP	T	US-5,350,992	09-27-1994	Colter	

FOREIGN PATENT DOCUMENTS

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DP	U	DE 1004 7629	04-11-2002	Linde AG		
	V	EP 1 055 885 A2	11-29-2000	Sharp Kabushiki Kaisha		
	W	EP 1 022 844 A2	07-26-2000	Matsushita Electric Industrial Co., Ltd.		
	X	WO 97/18420	05-22-1997	JDM, Ltd.		
	Y	EP 0 695 024 A2	01-31-1996	Sharp Kabushiki Kaisha		
	Z	JP 60102878	06-07-1985	Nihon Denki Seiki KK		
DP	AA	GB 1579045	11-12-1980	Electric Power Res Inst.		

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				Filing Date	February 27, 2004
				First Named Inventor	CRANE et al.
				Group Art Unit	n/a
				Examiner Name	n/a
				Attorney Docket Number	20712-0090
Sheet	2	of	3		

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Art Unit	n/a
Examiner Name	n/a
Attorney Docket Number	20712-0090

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		Number - Kind Code 2 (if known)			
DP	AC	US-5,488,279	01-30-1998	Kawamoto et al.	
	AD	US- 5,010,287	04-23-1991	Mukai et al. .	
	AE	US- 4,958,118	09-18-1990	Pottebaum	
	AF	US- 4,787,211	11-29-1988	Shaw	
	AG	US- 4,546,423	10-08-1985	Seki	
	AH	US- 4,152,902	05-08-1979	Lush	
	AI	US- 4,151,725	05-01-1979	Kountz et al.	
	AJ	US- 4,150,425	04-17-1979	Nagano et al.	
	AK	US- 3,909,687	09-30-1975	Abbondanti	
	AL	US- 3,621,365	11-16-1971	Beck et al.	
DP	AM	US- 3,390,320	06-25-1968	Kammiller et al.	
	AN	US- 2003/0041605 A1	03-06-2003	Butcher et al.	
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